WHICH FOREIGN ACCENTS CAN SWEDES IDENTIFY?

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INTRODUCTION

One of the major questions addressed by the current project
"Attitudes to Immigrant Swedish" at Stockholm University is to
what extent are attitudes to immigrants related to attitudes to
the way in which immigrants speak Swedish?

There are a number of ways to test this relationship, but one
of the most intuitively attractive is to let a group of listeners
hear a number of readings of a text in the belief that all the
speakers are different individuals. The listeners are given in-
formation about the speakers' nationalities. Unknown to the lis-
teners, they hear several speakers twice, but believe that in
each case they are hearing two different individuals with dif-
ferent mother tongues. If then the listeners' attitudes to the
speakers (as regards parameters such as intelligence, education,
friendliness and honesty) are elicited, any differences between
attitudes to both versions of the speakers heard twice must be
attributed to the difference in information fed to the listeners
regarding the speakers' origins.

It seems probable that some kinds of false information about
accent origin are easier to believe than others, simply because
some accents are more easily identified than others. It is pro-
bably difficult to persuade a native speaker of Swedish that a
certain accent is, for example, Finnish if it lacks most of the
features used by Swedes to identify Finnish accents. Conversely,
a typical Finnish accent is unlikely to be accepted as an example
of, for example, a Greek accent.

A series of experiments was designed to test the capabilities
of two groups of native speakers of Swedish: 18-year old students
of non-humanities subjects, and 6 teachers of Swedish as a second
language. Accented Swedish material was obtained from the IRIS
database[1]. A large number of recordings of immigrants from dif-
ferent linguistic backgrounds reading the well-known passage
"The North Wind and the Sun" in Swedish are contained in the
database. 35 versions of the first half of the text (about 25
seconds) were obtained from the database and elsewhere (4 native
Swedish versions were included).

EXPERIMENTS

Free response method

Two methods were used to elicit accent identifications. For half
the students (17), an answer sheet was developed where the same
three questions (compare Ryan 1983[2]) were asked about each of
the 35 voices the listeners heard: (a) Is the speaker a native
speaker of Swedish?; (b) If the answer to (a) was "no", which

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[1]Engstrand, O. (1987) The IRIS speech data base - a status
report. RUUL 17, 121-126. Inst. of Linguistics, Uppsala University.

[2]Ryan, E.B. (1983) Social psychological mechanisms under-
lying native speaker evaluations of non-native speech. Studies
in Second Language Acquisition 5(2) 148-159.

part of the world does the speaker come from?; (c) What is the
speaker's mother tongue? To help them to answer (b), the students
were given a map of the world with numbers representing areas
such as "North America", "Far East", Eastern Europe" etc. The
teachers of Swedish as a second language were asked the same
questions, except that for them, (b) was changed to: If the ans-
wer to (a) was "no", which language group does the speakers na-
tive language belong to, or which part of the world does the
language belong to? No map was provided for the teachers.

The results obtained from the students were disappointing in
the sense that they seldom answered question (c), and did not
always answer question (b). This was also true of the teachers,
though to a lesser extent. It is however possible to compare
the degree of accuracy with which the part of the world where
the speaker's native language is spoken was identified. For the
purposes of this experiment, the world was divided into eight
zones:

A Scandinavia   B N.America, N.Europe, Australia
C C. & S.America, S.Europe D N.Africa, Middle East
E E.Europe, Soviet   F Far East, S.E.Asia
G Africa   H Indian sub-continent

The following table shows how many percent of each listener group
identified each speaker correctly in terms of the above eight
zones:

ZONE	ACCENT	STUDENTS	TEACHERS
A	Finnish	94	100
A	Lappish	59	83
A	Swedish 1 (biling Sw-Tur)	94	100
A	Swedish 2 (Northern)	100	100
A	Swedish 3 (Scanian)	94	100
A	Swedish 4 (Finnish-Swedish)	100	100
A	Swedish 5 (Uppland)	100	100
A	Swedish 6 (Scanian-Uppland)	94	100
A	Norwegian	94	100
B	British English	94	100
B	American English	18	33
B	German	53	83
C	Spanish 1 (Spain)	12	50
C	Spanish 2 (Columbia)	24	50
C	Spanish 3 (Uruguay)	29	100
C	French 1	18	50
C	French 2	71	100
C	Greek 1	18	67
C	Greek 2	29	17
D	Turkish	12	50
D	Kurdish	12	83
D	Persian	0	0
D	Arabic	47	67
E	Polish 1	6	83
E	Polish 2	6	17
E	Serbo-Croat	0	33
E	Russian	47	83
E	Czech	6	83
F	Japanese	6	17
F	Korean	0	0
G	Swahili	0	67
G	Kinyarwanda	0	0
G	Tigrinya	6	33
G	Yoruba	17	67
H	Bengali	0	0

As can be seen, the teachers were considerably better than the pupils at identifying the geographical origin of the speakers. At least 40% of both the teachers and the pupils identified the Finnish, Lappish, native Swedish, Norwegian, British English, German, French, Arabic and Russian speakers' zone of origin, while the teachers could also place Spanish, Greek, Turkish, Kurdish, Polish, Czech, Swahili and Yoruba accents in the appropriate part of the world. Moreover, the teachers were more often able to correctly specify the speakers' native languages than were the pupils.

Guided response method

The figure on the next page shows the results for the remaining group of 19 pupils. They were tested using the same tape with 35 native Swedish and accented readings, and a form similar to the matrix shown in the figure, with possible native languages for the speakers listed down one side and the number of the speaker across the top. The pupils were instructed to place a cross in the box corresponding to the native language they believed each speaker to have and they were encouraged to place crosses in more than one box if they were unsure. The boxes with solid frames are those which were crossed by at least 40% of the pupils. The correct answers are written in bold typeface. The numbers in the boxes represent the number of pupils who crossed each possible native language for each speaker. The numbers at the top and bottom of the figure represent the order in which the speakers were presented to the pupils, and the numbers at the right of the figure represent the sum of responses for each possible native language.

The results were very similar to those obtained using the free response method. At least 40% of the pupils could identify French, native Swedish, Norwegian, Lappish and Finnish accents. This method permits an analysis of the wrong answers obtained. As can be seen from the figure, the following incorrect identifications were made by at least 40% of the pupils: Finland-Swedish was mistaken for a Finnish accent; Bengali, British and Swahili accents were heard as American (in the case of Bengali and Swahili, this can be attributed to the speakers having learned English prior to their arrival in Sweden); Yoruba was slightly more often marked as Kinyarwanda, but notice that Swahili also got quite a few votes — it seems likely that the speaker was simply identified as "African"; one of the Polish speakers was mistaken for Serbocroat (again, a correct identification of the speaker's native language group); the other Polish speaker and the Arabic speaker were identified as having Turkish as their native language; and the American English speaker (who spoke Swedish with only a slight American accent) was believed to be a Norwegian speaker.

In conclusion, these results show which accents are easily recognised by native Swedish listeners, and which false statements about accent origin listeners would be likely to believe, thus providing a basis for the kind of attitude experiment mentioned in the introduction.

SPEAKERS

Speaker no:	21	32	5	20	14	12	3	13	17	23	7	15	4	18	22	24	28	31	25	11	26	35	27	2	10	29	9	33	8	30	16	19	34	1	6	Summa
Persian	-	3		4	1		2														1	1		3	1		1	3	2						2	24
German	5		1		2		4	1		1		1							2	3	2	4	1						1							28
Polish	4	1	3	2	1		3	1	3												1	1	2	4	4	1	1	2	5							39
American	3		-	1																**14**				**10**					5	**8**		2				43
Kurdish	1		4	3			7	3	2	1	2	1							1	1	1		2	5	2		1	1	2	3					5	48
Spanish	1		2									-	**3**	**3**	1				2	1			3	1			2	1			2	2		1		25
Arabic	1		3	2	2	4	1	3	1	1									1	1			2	1	4	2	1	3			2				4	39
French	1											1	**2**	**17**									6	1								1				29
Swedish				2	1							1	**19**	**19**	**19**	-	**18**	**10**																		89
Serbocroat	2		**8**	1			4	2	1	2	3							2	**3**		1		3	3	1	2	3	4	2	1				1	1	50
Lappish			1	2	1	1	1					5			6								**9**				1	1			1	2	6			39
Bengali	2		1	1	2														1					-		1	1	3			2	2			1	17
Norwegian	1		**8**							1	3		5	1	1		4	4					**19**													47
Kinyarwanda	1		1	1		2	4	1	2	1									3				-	2		1	4	1	**8**		1	1	1		2	37
British	4		1				1												1		4		1	3			1	7			1				1	25
Korean	4	2		2			1			2	1	1	1						7	1	2		2	-			5				1	1			1	34
Tigrinya		2	1	2	2		3	1											2	1	1			1			**4**	3		3	2	1			1	31
Turkish	3	**9**	4	3	6	1	2	**8**	1										1				4	4	**3**		2	3	2	3					3	62
Yoruba			1	1	2	3	4	2											1					3	3	4		**7**		1	2	7			2	43
Swahili	2			2	2	2	4	2																3	3	5		7	-	1	2	7			2	44
Russian		2	4	1				2	1										2				1	3		2	6	1	**6**	2	1	2				37
Greek		1	4	2	1	2	4					6	1						1	2			1	3			3	3	4		1	**3**	**4**	2	7	52
Czech		2	2	4		3		2	3	2	2										4		2	4		2	2	2	2	2	2	2	1	**6**		47
Finnish																**18**			1				1	1	1								1	**18**	40
Japanese	2	2	1	1		2	1			1	2								1				4	2				4		1	2	3	1	**1**	31
Speaker no	21	32	5	20	14	12	3	13	17	23	7	15	4	18	22	24	28	31	25	11	26	35	27	2	10	29	9	33	8	30	16	19	34	1	6	